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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/688,878

10/21/2003

Osamu Murakami

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7590

06/29/2004

WENDEROTH, LIND & PONACK, L.L.P.

2033 K STREET N. W.

SUITE 800

WASHINGTON, DC 20006-1021

EXAMINER

BELLAMY, TAMIKO D

ART UNIT

PAPER NUMBER

2856

DATE MAILED: 06/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/688,878

Applicant(s)

MURAKAMI ET AL.

Examiner

Tamiko D. Bellamy

Art Unit

2856

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 7 and 8 is/are rejected.
- 7) ☒ Claim(s) 5 and 6 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 October 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 10/21/03.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Drawings***

1. Figure 7 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

2. Claims 5 and 6 objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim can not be a dependent from another multiple dependent claim. See MPEP § 608.01(n). Accordingly, claims 5 and 6 not been further treated on the merits.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Kaiho et al. (5,499,532).

Re to claim 1, Kaiho et al. discloses an infrared lamp (18) that dries the sample (20) (col. 4, lines 39-49). Kaiho et al. also discloses a temperature detection means (e.g., thermocouple thermometer) (see col. 4, lines 22-28).

Re to claim 2, as depicted in fig. 1, Kaiho et al. discloses the thermometer is within air tight chamber of the sample holder (2). The thermometer is inherently disposed above the sample (20).

Re to claim 3, Kaiho et al. discloses a light conducting member (e.g., infrared lamp 18).

Re to claim 4, Kaiho et al. discloses that a feed tube (30) supports a sensor of a thermometer; and the tube (30) is surrounded by a heat insulator (col. 4, lines 25-27).

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kaiho et al. (5,499,532) in view of Spannagel et al. (6,331,683).

Re to claim 7, Kaiho et al. discloses a temperature detection means (e.g., thermocouple thermometer) (see col. 4, lines 22-28). Kaiho et al. lacks the detail of a heating reference element to carry out temperature calibration of the radiation thermometer. Spannagel et al. discloses in figs. 3 and 4, a reference heating element

(e.g., temperature calibration disk 4) and a sample plate (e.g., scale pan/tray 3) inserted on a load receiver (2). Therefore, to modify Kaiho et al. by employing a heating reference element would have been obvious to one of ordinary skill in the art at the time of the invention since Spannagel et al. teaches a drying balance having theses design characteristics. The skilled artisan would be motivated to combine the teachings of Kaiho et al. and Spannagel et al. since Kaiho et al. states that his invention is applicable to measuring moisture content of a sample which includes a balance for measuring the weight of the sample and Spannagel et al. is directed to a drying balance of a weighing system including a radiation source (19) for drying a substance on a balance pan (3).

7. Claim 8 rejected under 35 U.S.C. 103(a) as being unpatentable over Kaiho et al. (5,499,532) in view of Spannagel et al. (6,331,683) as applied to claim 7 above, and further in view of Bohm (5,169,234).

Re to claim 8, the combination of Kaiho et al. and Spannagel et al. discloses a temperature detection means and a reference heating element. The combination of Kaiho et al. and Spannagel et al. lacks the detail of the temperature detection means having a light receiving portion with a clear protection cover to permit to receive infrared radiation from a light conducting member. As depicted in figs. 1 and 2, Bohm discloses an infrared temperature sensor (10) coupled to a contact thermometer (60), and including a clear protection cover (e.g., transparent material 16) (see col. 3, lines 67-68). ).

Therefore, to modify the combination of Kaiho et al. and Spannagel et al. the Kaiho et al. by employing a light receiving portion would have been obvious to one of ordinary skill

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in the art at the time of the invention since the combination of Kaiho et al. and Spannagel et al. Spannagel et al. teaches a device for measuring the moisture content of a sample. The skilled artisan would be motivated to combine teachings of the combination of Kaiho et al. and Spannagel et al. since the combination of Kaiho et al. and Spannagel et al. states that the invention is applicable to measuring moisture content of a sample which includes a balance for measuring the weight of the sample including a thermometer and Bohm is directed to a infrared temperature coupled to a thermometer sensitive to infrared radiation.

### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to the applicant's disclosure.

9. The following patents are cited to further show the state of art with respect to an infrared thermometer with fiber optic pickup:

U.S. Pat. No. (4,919,505) as to Bartosiak et al.

10. The following patents are cited to further show the state of art with respect to a thermocouple including a reference thermocouple:

U.S. Pat. No. (3,902,354) as to Harlen et al.

11. The following patents are cited to further show the state of art with respect to a an infrared temperature sensor detecting infrared emissions of a surface to produce a sampe temperature:

U.S. Pat. No. (5,983,711) as to Pappas et al.

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12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tamiko D. Bellamy whose telephone number is (571) 272-2190. The examiner can normally be reached on Mondays, Tuesdays & Fridays 6:30 AM to 3:30PM; and on Wednesdays and Thursdays the examiner 6:30 AM to 11:30 AM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on (571) 272-2208. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tamiko Bellamy

T.B.

June 24, 2004

  
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